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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,267	01/19/2001	Wen Tong	11962ROUS02U	1339

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EXAMINER

NGUYEN, HANH N

ART UNIT PAPER NUMBER

2668

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/766,267

Applicant(s)

TONG ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 11/30/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13, 15 and 17-23 is/are rejected.
- 7) ☒ Claim(s) 7 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

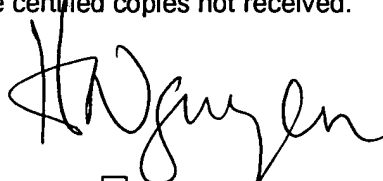
- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

HANH NGUYEN  
PRIMARY EXAMINER



### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,917,603 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 8 of the instant application discloses repeatedly and sequentially wirelessly transmitting time division multiplexed **slots** to the plurality of users; while claim 1 of the Patent discloses repeatedly and sequentially wirelessly transmitting time division multiplexed **superframes** to the plurality of users. Therefore, it would have been obvious to one skilled in the art to either transmit TDM slots or superframes to the plurality of users because transmitting the TDM slots can occupy in more than one frames.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 6, 8, 9, 13 and 15 are rejected under 35 USC 102(e) as being anticipated by Mochizuki (US pat. No. 6,628,633 B1).

In claims 1, 8 and 15, Mochizuki discloses a method for operating a base station to repeatedly and sequentially transmit data communications to a plurality of user terminals on a single wireless carrier over frames T1-T5 ( wirelessly transmitting time division multiplexed superframes to the plurality of user terminals ( fig.5 discloses transmitting forward packets over frames T1-T5 to terminals 1 and 2, col.8, lines 15-30); wherein each time division multiplex superframe comprises a plurality of high speed data frames (information comprised in frames is multimedia such as audio, image, data, see col.6, lines 55-60); wherein each of the high speed data frames carries at least one data communication (fig.5, frame T4 carries data for terminal 2; frame T5 carries data for terminal 1, col.8, lines 25-30); and wherein each of the high speed data frames includes a respective indication of at least one user terminal for which the at least one data communication is intended ( see fig.3, destination address attached to the forward packet so that mobile terminal checks the destination address to determine whether the forward packet is

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a packet of its own destination, see col.7, lines 30-35 & col.8, lines 60-67); and a respective indication of at least one data rate of the high speed data frame (fig.5, col.8, lines 15-30; forward packet from base station to terminal 1 is transmitted at rate R1 over frames T1, T2). Mochizuki further discloses determining a data rate of the particular high speed data frame based upon the respective indication; and receiving the data communication at the data rate (each mobile unit looks at destination address in the forward packet to determine whether the transmitted data are for it. The mobile unit despreads forward spreading codes for possible rates R1, R2 and R3; see col.8, lines 63-67).

In claims 2 and 9, Mochizuki discloses, in Fig.5, supporting a plurality of data rates within high speed data frame (See col.8, lines 22-30).

In claims 6 and 13, Mochizuki discloses each of the high speed data frames of the superframe further includes a pilot signal; and a plurality of reverse link power control bits intended for the plurality of user terminals ( base station adjusts the transmission power of forward packet and sends a power control signal to the mobile terminal, see col.11, lines 30-42). Therefore, the power control signal is well-known in the art to include a pilot signal and power control bits.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-23 are rejected under 35 USC 103(a) as being unpatentable over Mochizuki (US pat. No. 6,628,633 B1) in view of Hunsberger (US pat. 6,167,282).

In claims 21, 22 and 23 as explained by the rejection of claim 1, Mochizuki further discloses the base station ( fig.8) comprising an antenna 501( antenna); circular 502 coupled to the antenna 501( RF unit coupled to the antenna); packet control apparatus 530 (at least one digital processor). Mochizuki does not explicitly disclose the digital processor (the packet control processor 530) executing software instructions causing the base station to perform the above steps. Hunsberger discloses , in fig.2, a base station 200 comprising a processor 203. The processor 203 executes software instructions stored in memory 204 in order to perform various tasks including transmit/receive signal via a transceiver 202 of base station 200. See col.3, lines 22-40. Therefore, it would have been obvious to one ordinary skilled in the art to store software instructions taught by Hunsberger into the memories 551-553 (fig.9) of Mochizuki in order to perform required claimed limitations.

Claims 3-5, 10-12, and 17-20 are rejected under 35 USC 103(a) as being unpatentable over Mochizuki (US pat. 6,628,633 B1) in view of Rydbeck et al. (US Pat. No.6,332,006 B1),

In claims 3, 4, 5, 10, 11 and 12, Mochizuki does not disclose different coding types, coding frames with Walsh codes; and modulation scheme within a frame. Rydbeck et al. discloses, in Fig.6a, a base station 610 encodes data message (high rate data), voice messages ( low rate data) by a convolution coding, Walsh coding ( coding message by first coding type, second coding type) before transmitting to subscriber 650. The encoded messages is  $\pi/4$ -DQPSK modulated before being transmitted to the subscriber 650 ( modulating scheme). See col.10, lines 5-25 & col.11, lines 35-45. Therefore, it would have been obvious to one ordinary

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skilled in the art to combine the encoding methods of Rydbeck et al. into Mochizuki in order to reduce error and protect confidential data from being detected by undesired receivers.

In claims 17 and 18, Mochizuki discloses receiving data of the frame; and determine that the data frame is intended for the user terminal in claim 15. Mochizuki does not disclose decoding a portion of superframe with Walsh codes; decoding data frame using a first coding type; decoding data in frame using a second coding type. Rydbeck et al. discloses, in Fig.6B, the subscriber 650 receiving encoded messages, demodulates the messages as in Fig.5B ( first decoding type); decodes the messages by Walsh transform 652 (second decoding type). See col.10, lines 33-45. Therefore, it would have been obvious to one ordinary skill combine the decoding technics of Rydbeck et al. into Mochizuki in order to determine whether the transmitted data is intended to the terminal.

In claims 19 and 20, the limitations of these claims have been addressed in claims 1 and 15.

#### ***Allowable Subject Matter***

Claims 7 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In claims 7 and 14, the prior art does not disclose a high speed data frame including a secondary explicit data rate indicator indicating a user terminal of the plurality of user terminals for which a second portion of the high speed data frame is intended.

***Response to Arguments***

Applicant's arguments with respect to claims 1-24 have been considered. Claims 1-6, 8-13, 15, and 17-23 are moot in view of the new ground(s) of rejection. Claims 24 is allowed over the prior art. Claims 7 and 14 are objected to as being dependent from a rejected base claim.

In claims 1 and 8, Applicant argues that the forward packet in Mochizuki does not disclose a respective indication of transmission rate.

Refer to Fig.5 in Mochizuki, respective indication of transmission rate in the forward packets from base station are rate R1 in data for terminal 1 is transmitted over frames T1, T2; rates R3 in data for terminal 2 is transmitted over frame T4; rate R2 in data for terminal 1 is transmitted over frame T5 respectively. (see col., lines 15-30). Therefore, examiner believes that Mochizuki teaches all claimed limitations.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8:30 to 4:30. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on 571 272 3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen  
Primary Examiner



**HANH NGUYEN  
PRIMARY EXAMINER**